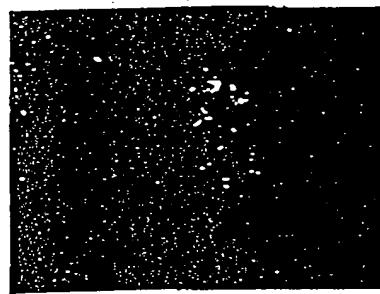


A. E16



B. P60

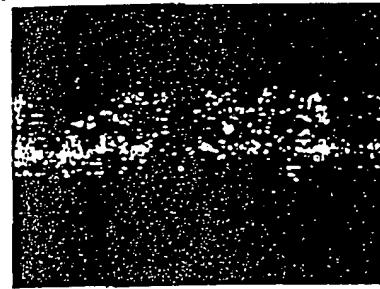


Fig. 1

## Figure 2

Nestin RT-PCR of 50 rat islets

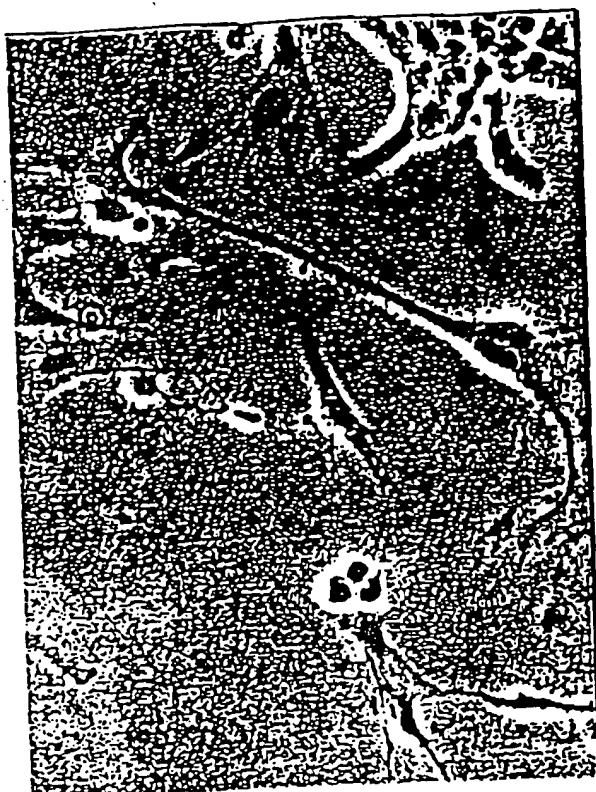


1018 bp  
←  
507 bp  
←

Amplification of a single band of the correct size of 834 bp. In between the forward [GCAGGGCGGTGCGTGACTAC] and reverse primer [GGGTGGTGAGGGTTGAGGTTGTG] are 3 introns located.

Figure 3

Nestin positive cells proliferate around islets in vitro



Phase contrast image of cells  
surrounding cultured islets (200x)

Figure 4

Development of islet-like structures in vitro



100x



200x

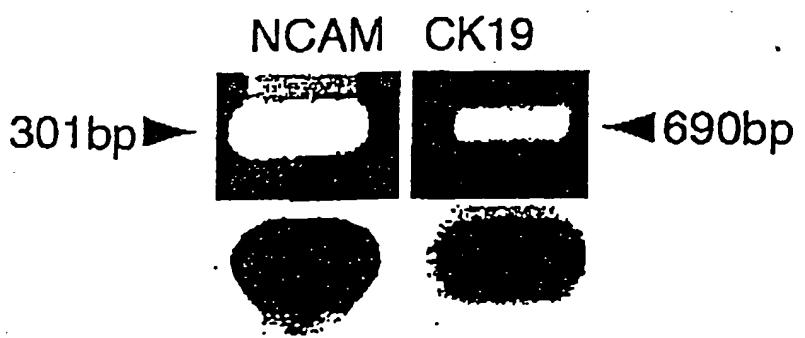


Fig. 5

Figure 6

## Induction of nestin mRNA expression by high glucose in pancreatic islets

RT-PCR of 50 rat islets incubated for 4 days at 5.6 mM or 16.7 mM glucose

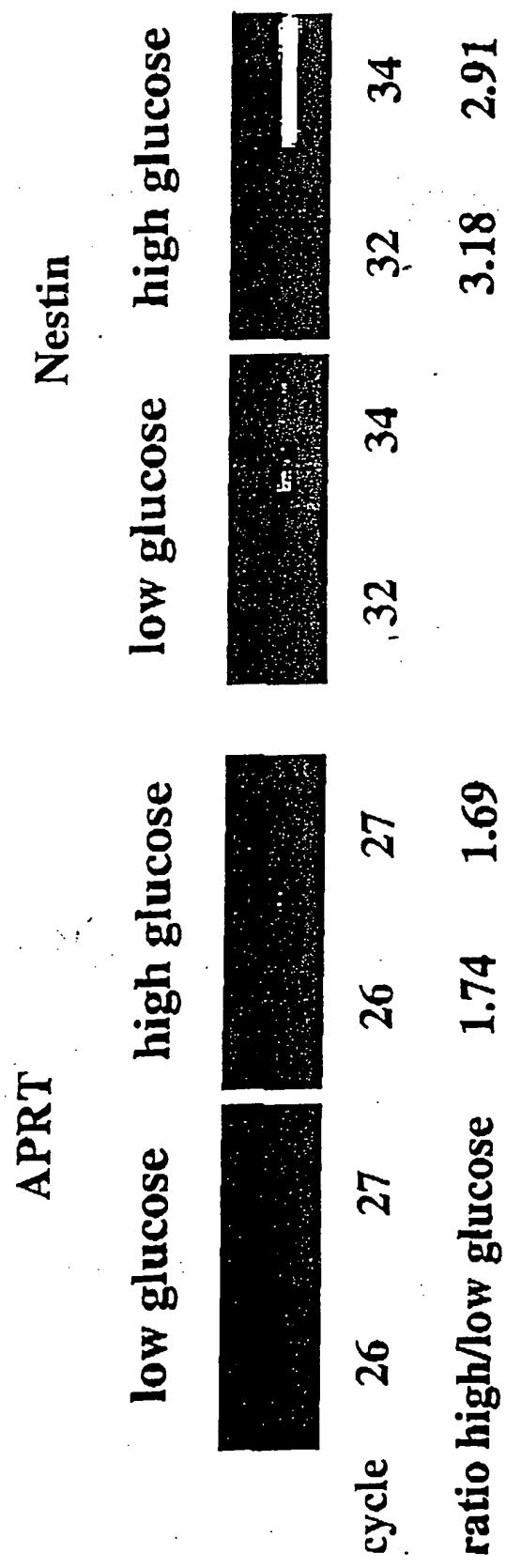


Figure 7 (v)

Nestin Amino Acid Sequence:

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APRLPAPPRPPAPAPEVEELARRLGEAWRGAVRGYQERVAHMETSQDTRERLARAVQ  
GAR  
EVRLELQQQLQAERGGLLERRAALEQRLEGRWQERL RATEKFQLAVEALEQEKKQGLQSQ  
IAQVLEGRQQQLAHLKMSLSLEVATYRTLLEAENSRLQTPGGGSKTSLSFQDPKLELQF  
PRTPEGRLGSLLPVLSPTSLPSPLPATLETPVPAFLKNQEFLQARTPTLASTPIPPT  
PQAPSPAVDAEIRAQDAPLSLLQTQGGRKQAPEPLRAEARVAIPASVLPGPEEPGGQR  
QEASTGQSPEDHASLAPPLSPDHSSLEAKDGESGGSRVFSICRGEGEQIWLVEKET  
AIEGKVVSSLQQEIWEEEEDLNKEIQDSQVPLEKETLKSLGEEIQESLKTLENQSHE  
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SGGNESSRKGSRTTGVCSEPRDIQTPGRGESGIIEISGSMEPGEFEISRGVDKESQ  
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VKGGAEGLQDPEGQSQQVGTPLQAPQGLPEAIEPLVEDDVAPGGDQASPEVMLGSEP  
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ESWSSGED"

Nestin Nucleotide Sequence:

BASE COUNT 1238 a 1176 c 1676 g 764 t ORIGIN 1

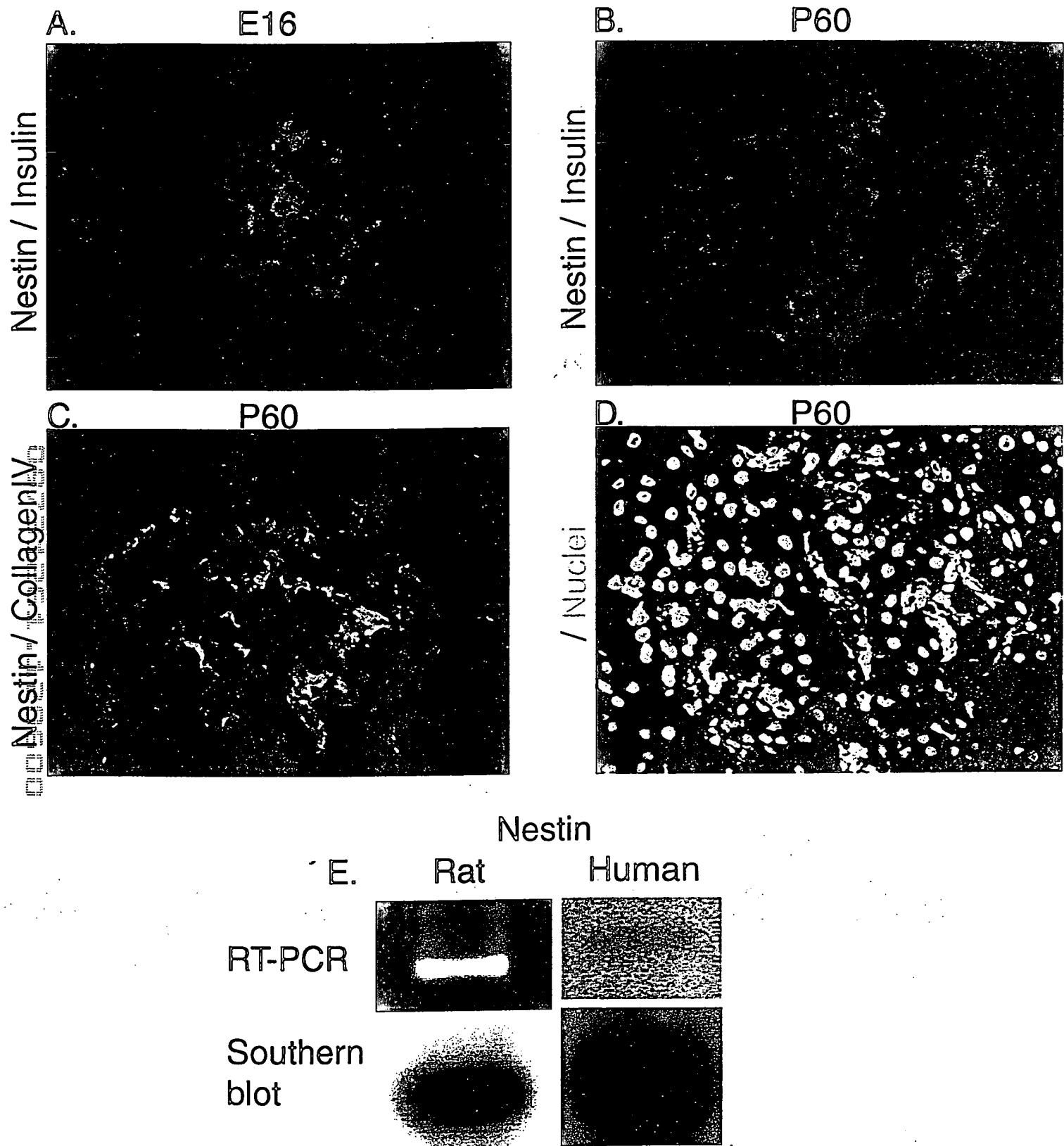
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Figure 7 (continued) (z)

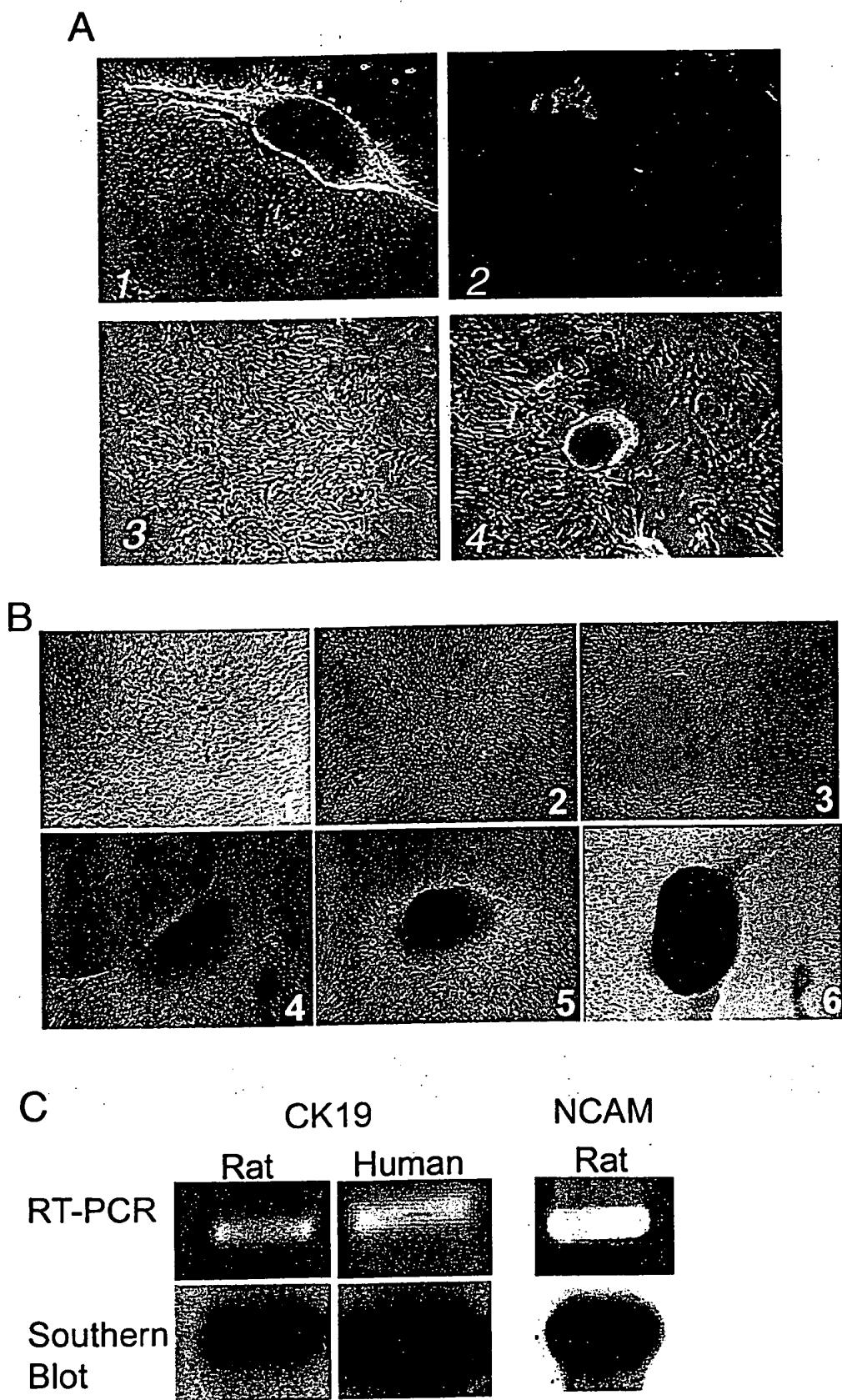
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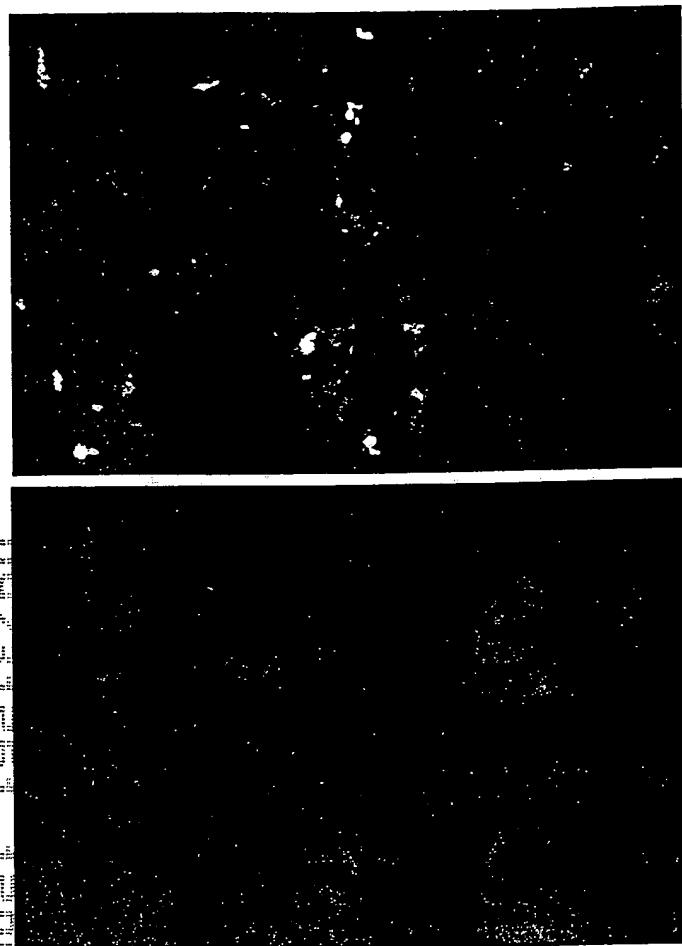
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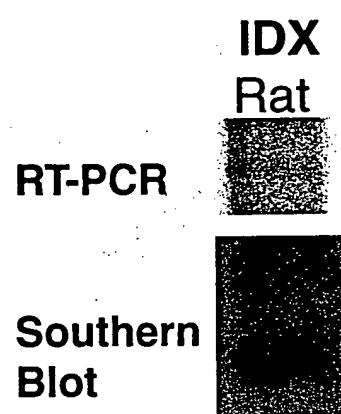
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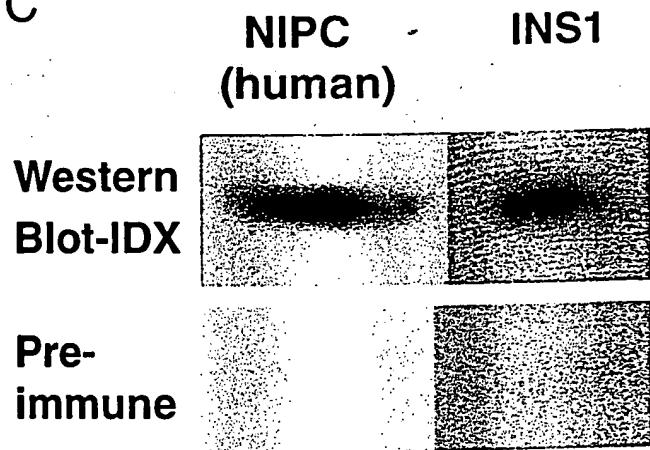
A



B



C



D

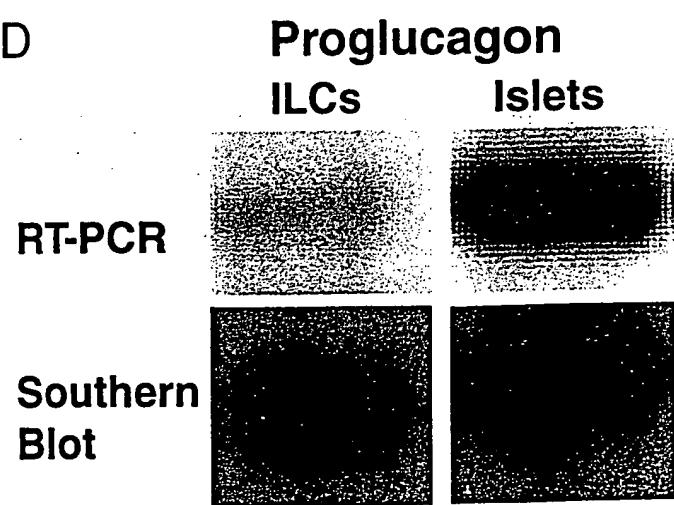
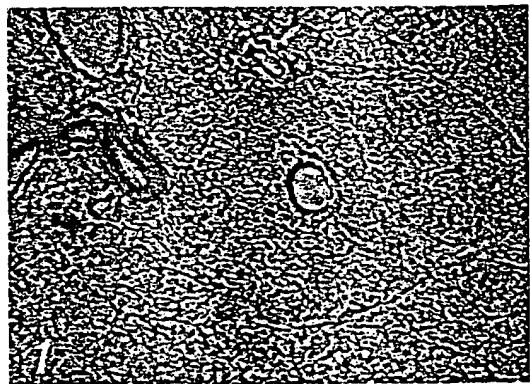


FIG 10

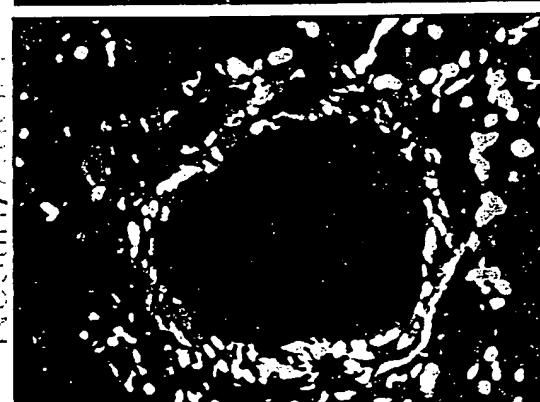
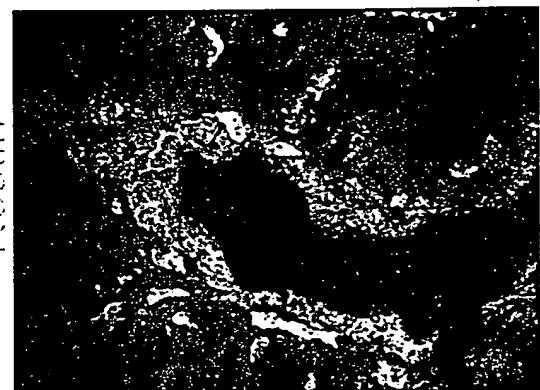
A



B

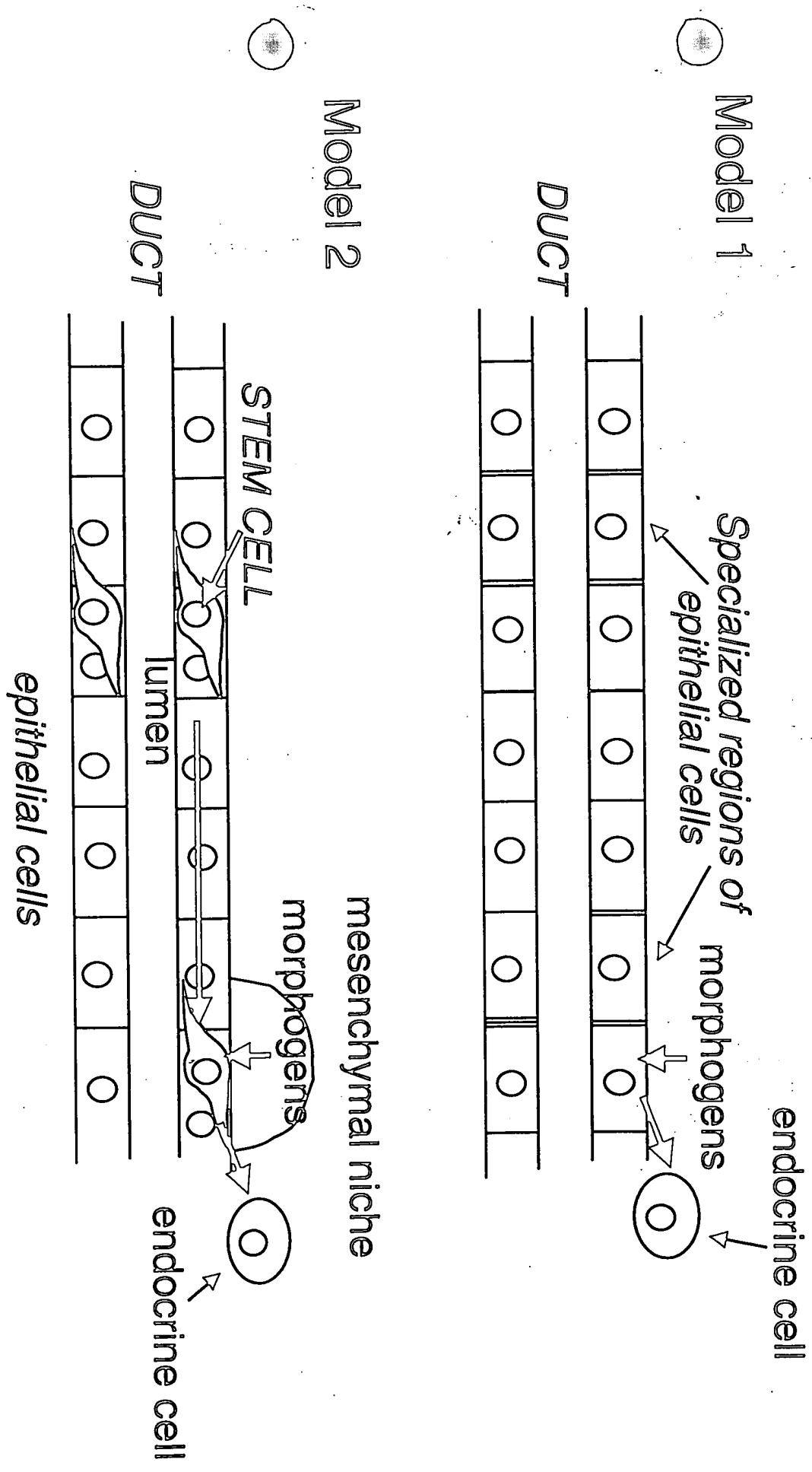


C



CK19 / Nestin

FIG 11



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FIG 13A

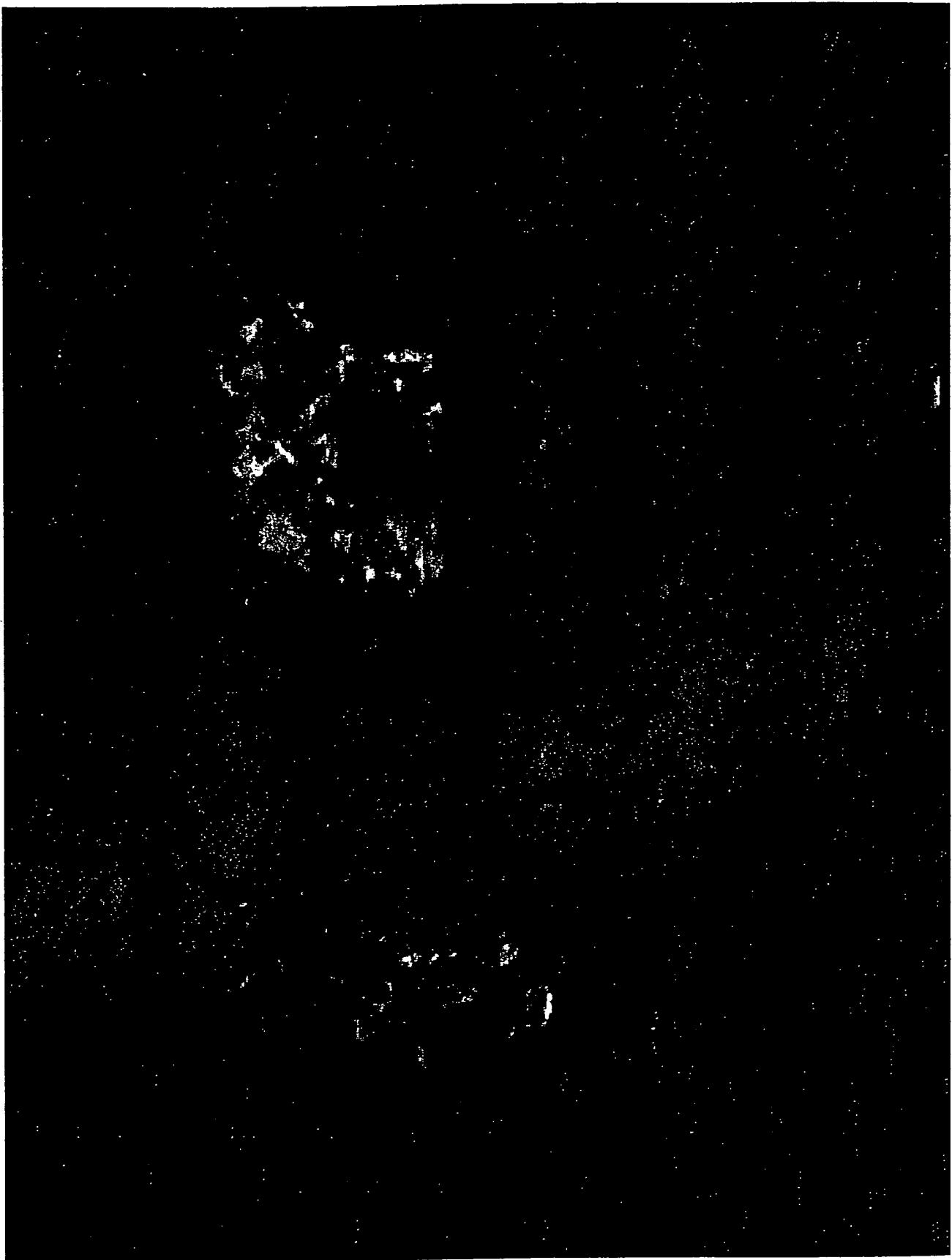


Fig 13 B

# Sequential changes of transcription factors during development of the endocrine pancreas (mouse)

Day:

E8.5

E9.5

E13

E14

E15

1st transition

PDX-1  
Beta2/neuroD

PDX-1  
glucagon  
Ngn-3  
(insulin)  
No hormones

Is1  
Pax6  
Nkx6.1

PDX-1  
Beta2/neuroD

B-Cell  
α-cell  
β-cell

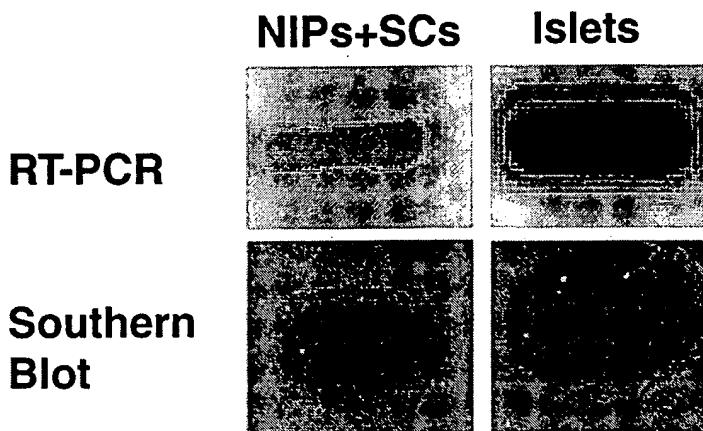
differentiation

Stem cell  
Progenitor proliferation

Brain-4  
Beta2/neuroD  
Is1  
Pax6

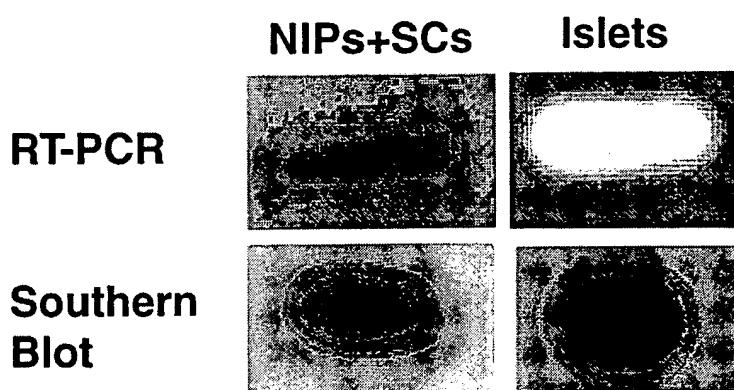
**A**

**Proglucagon**

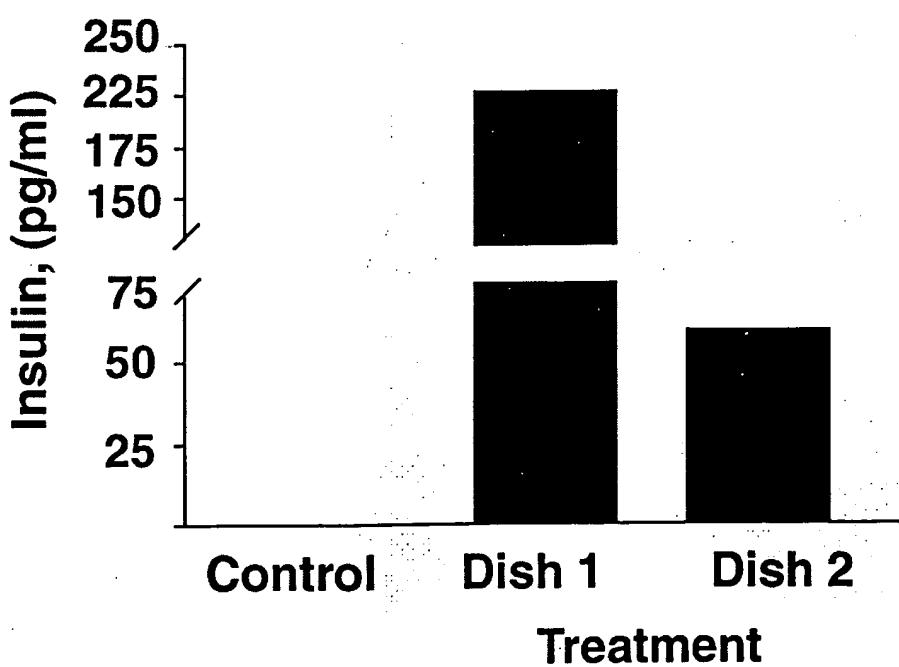


**B**

**Insulin**



**C**



NEURO-

ENDOCRINE

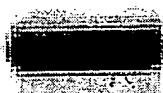
EXOCRINE

HEPATIC

SYN



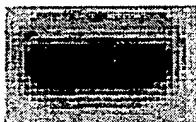
AMY



TTR



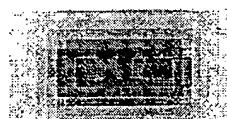
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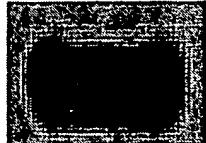
CARB



HGF



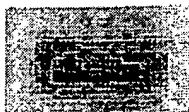
GLUT-2



E-CAD



XBP



AFP

